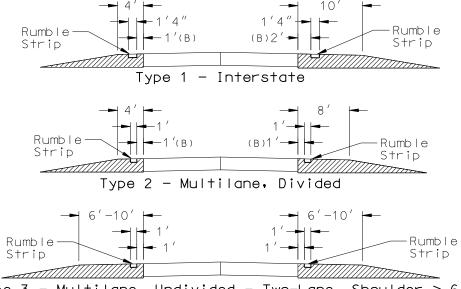
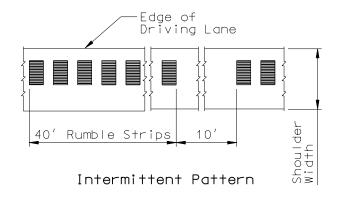
SHOULDER RUMBLE STRIPS



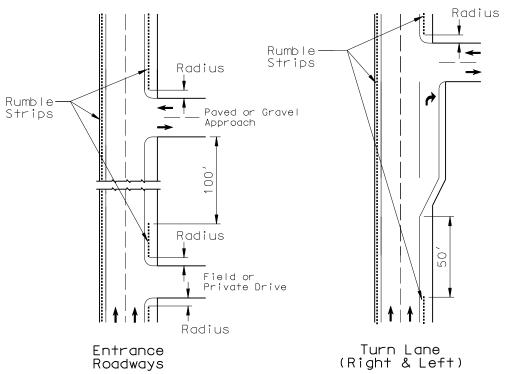
Type 3 - Multilane, Undivided - Two-Lane, Shoulder ≥ 6

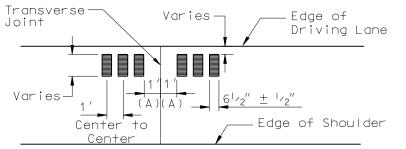


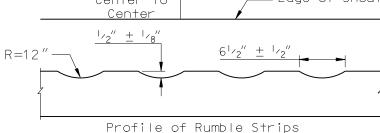
Type 4 - Two-Lane, Shoulder < 6'



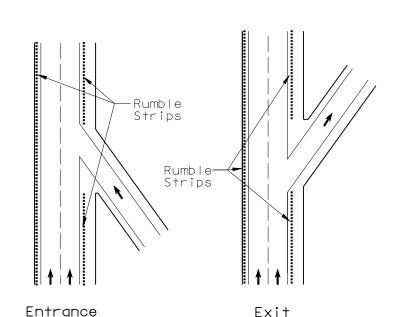
- (A)Discontinue rumble strip approximately 1'-0" on both sides of transverse joint.
- (B)Rumble Strip may be placed at the edge of the driving lane if the shoulder is less than 4'.



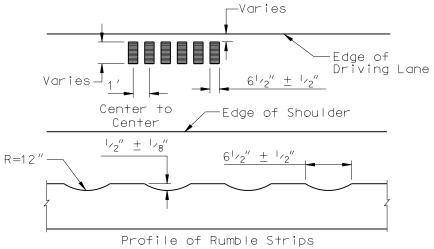




Profile of Rumble Strips
PCC Pavement Detail



Ramp



Ramp

Bituminous Pavement Detail

NOTES:

- 1) Rumble strips shall be milled into the bituminous and concrete paved shoulders. The milled materials shall be swept off the entire width of the paved shoulder.
- 2) Rumble strips shall be discontinued across the entire length of turn lanes, turn lane tapers, ramp tapers, graveled & paved intersections, private drives, and field drives, as shown above.
- 3) The rumble strips milled into new or existing bituminous pavements shall be fog sealed across the full width of the milling with an application of SS-1h or CSS-1h emulsified asphalt at a rate of about 0.10 Gal/SY. All costs for fog sealing shall be included in the cost bid for rumble strips.
- 4) Discontinue rumble strips through all urban areas, where there is curb and gutter, highway posted speed is 45 mph or less, across bridge decks and approach slabs, and adjacent to guardrail if the clear path between the rumble strip and the guardrail is less than 5 FT.

Types of Shoulder Rumble Strips				
[nterstate		Type 1-16" Continuous		
	Left (Inside/Median)	Type 1-16" Continuous		
Multilane, Divided		Type 2-12" Intermittent		
	Left (Inside/Median)	Type 2-12" Continuous		
Multilane, Divided; Two-Lane; Paved Shoulder ≥ 6'	Both (Rt & Lt)	Type 3-12" Intermittent		
Two-lane; Paved Shoulder; ≥ 4' and < 6'	Both (Rt & Lt)	Type 4-12" Continuous		

	NORTH DAKOTA DEPARTMENT OF TRANSPORTATION		Thi
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_	DATE	CHANGE	l й
_	03-21-02 05-10-02 10-18-02 06-03-03 10-23-03	General revisions Revised note 3 Removed pay item Rumble strip location Added table	Regi
	12-01-04	PE Stamp added	on 1
			ori is st

This document was originally issued and sealed by MARK S GAYDOS, egistration Number PE-4518, on 12/01/04 and the original document stored at the North Dakota Department of Transportation